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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/915,884 | 07/26/2001 | Joseph Paul Kuczynski | ROC920010031US1 | 7502 |

7590 05/23/2003
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EXAMINER

MARTINEZ, JOSEPH P

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| ART UNIT | PAPER NUMBER |
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2873

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,884

Applicant(s)

KUCZYNSKI, JOSEPH PAUL

Examiner

Joseph Martinez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 11 of copending Application No. 09/915,884. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending Application No. 10/161,280 teaches the use of acrylate adhesives. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify an optoelectronic device with a multifunctional acrylate resin in order to provide an optoelectronic device capable of maintaining stable glued joints in a variety of conditions.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhara et al. (5787215) in view of Miura et al. (6170996).

Re claims 1-3, Kuhara et al. teach for example, an optical subassembly for an optoelectronic module (laser/photodiode module, fig. 42a), comprising: a lens (lens 330, fig. 42a); an optoelectronic device (laser chip 325 and monitoring photodiode 264, fig. 42a); but fail to implicitly teach an adhesive interface positioned between and in physical contact with the lens and the optoelectronic device. However, Miura et al. teach for example, an adhesive interface (adhesive 18, fig. 4C) positioned between and in physical contact with the lens (convex portion 18a, fig. 4C) and the optoelectronic device (optical element 10, fig. 4C). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical subassembly of Kuhara et al. with an adhesive interface of Miura et al. in order to provide a simple, hermetically sealed optical module.

Re claims 11 and 12, Kuhara et al. teach for example, an optoelectronic module, comprising: a housing (covar package 326, fig. 42a); an electronic circuit board (submount 328, fig. 42a) mounted within the housing; at least one optical subassembly (laser/photodiode module, fig. 42a) connected to the electronic circuit board, the at least one optical subassembly comprising: a lens (lens 330, fig. 42a); an optoelectronic device (laser chip 325 and monitoring photodiode 264, fig. 42a), but fail to implicitly teach an adhesive interface positioned between

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and in physical contact with the lens and the optoelectronic device. However, Miura et al. teach for example, an adhesive interface (adhesive 18, fig. 4C) positioned between and in physical contact with the lens (convex portion 18a, fig. 4C) and the optoelectronic device (optical element 10, fig. 4C). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical subassembly of Kuhara et al. with an adhesive interface of Miura et al. in order to provide a simple, hermetically sealed optical module.

Re claims 15-17 and 20, Kuhara et al teach for example, a method of making an optical subassembly (laser/photodiode module, fig. 42a) for an optoelectronic module, comprising the steps of applying an adhesive to a lens (col. 36, ln. 3-4); applying an adhesive to an optoelectronic device (col. 36, ln. 3-4); joining the lens having the adhesive applied thereto and the optoelectronic device having the adhesive applied thereto (col. 36, ln. 3-4), but fail to implicitly teach curing the joined adhesive to form an adhesive interface positioned between and in physical contact with the lens and the optoelectronic device. However, Miura et al. teach for example, curing the joined adhesive (col. 2, ln. 36-37) to form an adhesive interface (adhesive 18, fig. 4C) positioned between and in physical contact with the lens (convex portion 18a, fig. 4C) and the optoelectronic device (optical element 10, fig. 4C).

Re claims 22-24, Kuhara et al. teach for example, Kuhara et al. teach for example, an optical subassembly for an optoelectronic module, comprising: a housing (covar package 326, fig. 42a) defining an interior cavity, a lens (lens 330, fig. 42a) which refracts light passing between said interior cavity and outside said housing, an optoelectronic device (optical element 10, fig. 4C) facing said interior cavity opposite said lens, but fail to implicitly teach an adhesive interface filling at least a portion of said interior cavity between said lens and said optoelectronic

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device, said adhesive interface being in physical contact with said lens and said optoelectronic device, wherein light passing between said optoelectronic device and said lens passes through said adhesive interface. However, Miura et al. teach for example, an adhesive interface (adhesive 18, fig. 4C) filling at least a portion of said interior cavity between said lens and said optoelectronic device, said adhesive interface being in physical contact with said lens and said optoelectronic device, wherein light passing between said optoelectronic device and said lens passes through said adhesive interface (fig. 4C).

Re claims 4, 13, 18 and 25, supra claims 1, 11, 15 and 22, respectively. Kuhara et al. teach for example, the lens has a surface the shape of which is selected based on a refractive index of the adhesive interface (col. 5, ln. 7-16). The office interprets the resin having transparency to an optical signal to be transmitted or received by the optical element, wherein convex portion 18a is made of resin 18 to teach the claimed limitations as set forth.

Re claims 5, 14 and 26, supra claims 1, 11 and 22, respectively. Kuhara et al. in view of Miura et al. teach the optical subassembly as noted above, but fail to implicitly teach the lens is integrally formed with a housing member of the optical subassembly, and wherein the adhesive interface is in physical contact with at least a portion of the housing member that does not comprise the lens. Official Notice taken. It is well known in the art of optical subassemblies to provide for an integrally formed lens for ease of manufacturing.

Re claim 6, supra claim 1. Kuhara et al. in view of Miura et al. teach the optical subassembly as noted above, but fail to implicitly teach at least a portion of the housing member and the lens is formed from polyetherimide. Official Notice taken. It is well known in the art of optical subassemblies to use polyetherimides in manufacturing.

Re claim 7, supra claim 1. Miura et al. further teach for example, the adhesive interface has a predetermined optical transmittance at the operating wavelength of the optoelectronic device (col. 5, ln. 7-16).

Re claim 8, supra claim 7. Kuhara et al. in view of Miura et al. teach the optical subassembly as noted above, but fail to implicitly teach the operating wavelength of the optoelectronic device is about 850nm. Official Notice taken. It is well known in the art of optical subassemblies to operate in the wavelength of 850 nm because lasers in that wavelength are commercially available.

Re claims 9 and 19, supra claims 1 and 15, respectively. Kuhara et al. further teach for example, herein the adhesive interface is formed by curing an adhesive material selected from the group consisting of epoxy adhesives (col. 36, ln. 3-4).

Re claim 10, supra claim 9. Kuhara et al. in view of Miura et al. teach the optical subassembly as noted above, but fail to implicitly teach the adhesive material is a urethane-acrylate adhesive that includes a polyurethane oligomer. Official Notice taken. It is well known in the art of optical subassemblies to use adhesive material is a urethane-acrylate adhesive that includes a polyurethane oligomer for their optical properties.

Re claim 21, supra claim 15. Miura et al. further teach for example, the curing step includes the step of heating the joined adhesive (col. 6, ln. 11-12).

Re claim 27, supra claim 22. Miura further teaches for example, said adhesive interface fills substantially all of said cavity (fig. 1).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Martinez whose telephone number is 703-305-0577. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4883.

JPM
May 19, 2003



Hung Xuan Dang
Primary Examiner